

REMARKS

Claims 1-24 are pending in the present application.

In the Office Action, claims 1-6, 8-9, 11-12, and 14-23 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Honkasalo (U.S. Patent No. 5,995,496). Claims 7, 10, 13, and 24 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Honkasalo in view of LaDue (U.S. Patent Application Publication No. 2003/0133423). The Examiner's rejections are respectfully traversed.

Independent claim 1 sets forth transmitting at least one sub-frame associated with a second frame. If an acknowledgement message associated with a first frame is received, then the sub-frame(s) are transmitted using at least a first and a second wireless resource. If a non-acknowledgement message associated with a first frame is received, then the sub-frame(s) are transmitted using the second wireless resource. Independent claim 14 sets forth receiving at least one sub-frame associated with a second frame. If an acknowledgement message associated with a first frame is transmitted, then the sub-frame(s) are received using at least a first and a second wireless resource. If a non-acknowledgement message associated with a first frame is transmitted, then the sub-frame(s) are received using the second wireless resource.

Honkasalo describes a power control method for a packet-switched wireless communication system that is used to control transmission power within a range limited by a maximum and minimum value. See Honkasalo, col. 4, ll. 26-33. The wireless communication system described by Honkasalo may be in either an "Initial" state or a "Continuous" state. In the Initial state, feedback information indicating the quality of the received signal is not available to the transmitting device for controlling power and so control of the power is based on an open-loop power control technique. The transmitting device transitions to the "Continuous" state in

response to receiving either a positive or a negative feedback message from a receiving device. In the "Continuous" state, the transmitting device supposes that it regularly receives feedback information from the receiving device and can therefore implement a close-loop power control technique. See Honkasalo, col. 4, l. 64 – col. 5, l. 22. Honkasalo describes a power control technique that modifies the transmission power based on the acknowledgment messages that are received by the transmitting device. See Honkasalo, col. 9, ll. 20-34.

The Examiner alleges that Honkasalo describes transmitting sub-frames associated with one or more frames. Applicants respectfully disagree. Honkasalo does not describe or suggest dividing packets or frames into sub-frames (as set forth in independent claims 1 and 14) and, in particular, Honkasalo is completely silent with regard to incrementally redundant sub-frames, such as set forth in claims 6 and 19.

The Examiner also alleges that Honkasalo describes transmitting a sub-frame associated with a second frame using a first resource if a non-acknowledgment message is received in response to transmitting a first frame and transmitting the sub-frame associated with the second frame using the first resource and a second resource if an acknowledgment message is received in response to transmitting the first frame. Applicants respectfully disagree. As discussed above, Honkasalo is only concerned with providing alternate power control methods (*i.e.*, open-loop and closed-loop) based upon a particular state of a transmitting device. Thus, Applicants respectfully submit that Honkasalo describes techniques for controlling a single resource, the transmission power, based upon received acknowledgement messages. Applicants therefore submit that Honkasalo fails to teach or suggest transmitting a sub-frame associated with a second frame using a first resource and a second resource if an acknowledgment message is received in response to transmitting the first frame, as set forth in independent claims 1 and 14.

For at least the aforementioned reasons, Applicants respectfully submit that the present invention is not anticipated by Honkasalo and request that the Examiner's rejections of claims 1-6, 8-9, 11-12, and 14-23 under 35 U.S.C. § 102(b) be withdrawn.

Moreover, it is respectfully submitted that the pending claims are not obvious in view of Honkasalo and LaDue, either alone or in combination. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). As discussed above, Honkasalo fails to teach or suggest transmitting a sub-frame associated with a second frame using a first resource and a second resource if an acknowledgment message is received in response to transmitting the first frame, as set forth in independent claims 1 and 14. LaDue describes transmitting do-not-transmit messages. However, LaDue fails to remedy the aforementioned fundamental deficiency of Honkasalo. Applicants therefore respectfully submit that the cited references fail to teach or suggest all the limitations set forth in independent claims 1 and 14.

Applicants further submit that the cited references fail to provide any suggestion or motivation to modify and/or combine the prior art of record to arrive at the claimed invention. To the contrary, Honkasalo is only concerned with techniques for controlling a single resource, the transmission power, based upon received acknowledged messages. Consequently, Honkasalo fails to provide any suggestion or motivation to modify the prior art of record to include transmitting a sub-frame associated with a second frame using a first resource and a second resource if an acknowledgment message is received in response to transmitting the first frame, as set forth in independent claims 1 and 14.

For at least the aforementioned reasons, Applicants respectfully submit that the Examiner has failed to make a *prima facie* case that the present invention is obvious over Honkasalo and LaDue, either alone or in combination. Applicants respectfully request that the Examiner's rejections of claims 7, 10, 13, and 24 under 35 U.S.C. § 103(a) be withdrawn.

For the aforementioned reasons, it is respectfully submitted that all claims pending in the present application are in condition for allowance. The Examiner is invited to contact the undersigned at (713) 934-4052 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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